| | | | | DOCUM | ENT MODIFIC | ATION REQUEST (DMR) PAGE 1 of | | | | |
|--|---|---|---------------------------------------|---------------------------|------------------|--|--------|-----------------------------|--|--|
| Print or Type All Information (Except Signatures) | | | | | | 1/31/95 | DMR No | 95-DMR-000106 | | |
| 2 Existing Document Number/Revision 5-21000-OPS-GT 5/Rev 2 | | | | | | New Document Number or Document Number if it is to be changed with this Revision N/A | | | | |
| 4 Originator's Name/Phone/Pager/Location | | | | | | 5 Document Title | | | | |
| N Elzinga/740-2740/WCFS Denver | | | | | | Plugging and Abandonment of Boreholes | | | | |
| 6 Document Type 7 Document Modification Type (Check only one) | | | | | | | | | | |
| Other New Revision Intent Cl | | | | | | ······ | Change | ial Correction | | |
| 8 Item | 9 Page | 10. Step | | 11 Proposed Modifications | | | | | | |
| | | Following the fourth full sentence of this paragraph, ending with "tremie pipe will then be removed from the hole" add "For the OU-2 Trenches and Mound Site Characterization Program, the following procedure will be utilized to abandon the shallow (less than 10 feet) direct push soil gas or subsurface soil sample locations in which groundwater was not encountered. Plugging of these locations will involve slowly pouring dry bentonite pellets down the direct push hole, then hydrating with on-site Rocky Flats potable water according to manufacturer's recommendations." (Research for Modification EJO # TP # etc.) practical to tremie a liquid bentonite slurry down a 1" direct push hole | | | | | | | | |
| OU 2 Temporary Limited Scope Expires July 31, 1995 If modification is for a new procedure or a revision. Set concurring disciplines in Block 13, and enter N/A in Blocks 14 and 15. If modification is for any type of change or a cancellation organizations are listed in Block 13 then Concurror prints, and signs in Block 14, and distast in Block 15. | | | | | | | | | | |
| | | | | igns in Block 14 and di | stee in Block 15 | | | | | |
| 13. Organ | | | (if applicable) | | | | | 15 Date (if applicable) | | |
| SME | = Mgr | PJ | ny P Lovs | | 1 | 3 6 | | 2-23-95 | | |
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| 16. Originator's Supervisor (print/sign/date) | | | | | | | | | | |
| Peter J Laurin 17 Assigned SME/Phone/Pager/Location 18. Cost Center 19. Charge Number 20. Requested Completion Date 21 Effective Date | | | | | | | | | | |
| Timothy P Lovseth 3112 | | | | | | | | | | |
| | Yee No N NA 24 Responsible Manager (print, sign date) Peter J Laurin | | | | | | | | | |
| | Peter J Laurin Reviewed For CLASSIFICATION / UCN | | | | | | | | | |
| RF-47940 (5/93) BY | | | | | | | | D PUH CLASSIFICATION / UCNI | | |

ADMIN RECORD

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PLUGGING AND ABANDONMENT OF BOREHOLES

EG&G ROCKY FLATS PLANT EMD MANUAL OPERATION SOP

Manual: Procedure No.: 5-21000-OPS GT.5, Rev. 2 1A of 8

Category 2

Page.
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2-28-95 Environmental Management

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| Form GT 5a (Rev 3) | 1/10/94 | 93-DMR-000961 |

PLUGGING AND ABANDONMENT OF BOREHOLES

EG&G ROCKY FLATS PLANT EMD MANUAL OPERATION SOP

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Category 2

75-DMR-000106

Effective Date: Organization:

2-28 75 Environmental Management

density of 9 9 pounds per gallon after mixing A mud balance will be used to check the grout density for each borehole prior to pumping. The grout will be tremied using a side-discharge tremie pipe. The tremie pipe can be raised during grouting, but it will be maintained at least 5 to 10 feet below the upper level of the grout The grout will be pumped until any other fluids have been displaced from the hole and undiluted grout is observed flowing from the hole. The tremie pipe will then be removed from the hole For the OU-2 Trenches and Mound Site Characterization Program, the following procedure will be utilized to abandon the shallow (less than 10 feet) direct push soil gas or subsurface soil sample locations in which groundwater was not encountered Plugging of these locations will involve slowly pouring dry bentonite pellets down the direct push hole, then hydrating with on-site Rocky Flats potable water according to manufacturer's recommendations After settlement of the bentonite grout, the hole will be cleaned out to a depth of approximately 3 feet and a cement bentonite grout will be placed from the ground surface to a depth of approximately 3 feet. This cement bentonite grout cap will be installed after 24 hours or more to allow for primary grout settlement. If the initial grout settlement is 3 feet or more, the upper grout surface will be rehydrated by adding waterand waiting approximately 30 minutes prior to placing the cement bentonite grout cap Alternatively, the dehydrated grout may be removed A metal cap with the borehole ID and survey information will be embedded in the cement bentonite grout The following information will be inscribed in the cap See the Field Sampling Plan (FSP) for survey requirements

- Borehole number
- Survey coordinates
- Elevation
- Date